As a preliminary matter, Applicants wish to thank the Examiner for thorough examination of the present application as evidenced in the non-final Office Action dated October 18, 2010.

Applicants have revised Claims 6, 9, 13, and 17. No new matter is added. Claims 1-20 remain pending upon entry of the above amendment. Reconsideration and allowance are respectfully requested.

Claim Rejections -35 USC§103

The Office Action rejected Claims 1-10, 12-15, and 17-19 under 35 U.S.C. §103(a) as being unpatentable over U.S Patent No. 6,950,441 B1 to Kaczmarczyk et al. in view of U.S Patent No. 6,363,424 B1 to Douglas et al. Applicants respectfully traverse the rejection and submit that Claims 1-10, 12-15, and 17-19 conform to the provisions of 35 U.S.C. §103(a).

Claim 1:

Claim 1 of the present application recites:

"A Softswitch device for a Next Generation Network, characterized in that said Softswitch device implements an intelligent network service in the Next Generation Network, and said Softswitch device includes:

a network adaptive device located at a bottom layer of the Softswitch device, the network adaptive device is for implementing communication between the Softswitch device and other devices in said Next Generation Network, as well as receiving call requests;

a call server in a higher layer of the network adaptive device, the call server is for determining whether the call received by said network adaptive device is a common call or a call of the intelligent network and processing the common call; and

an Intelligent Network Application Part (INAP), Customised Applications for Mobile network Enhanced Logic Application Part (CAP) or Mobile Application Part (MAP) adapter in a higher layer of the call server, the adapter is for responding to the call of the intelligent network and encoding or decoding an INAP message. "

With reference to Kaczmarczyk et al., however, it mainly relates to a _system and method to internetwork telecommunication networks of different protocols. (Please see lines 11~13 in column 1 of Kaczmarczyk et al.)_

Comparing Claim 1 with Kaczmarczyk et al., Applicants respectfully submit that Claim 1 includes at least the following distinguishing technical features from Kaczmarczyk et al.

1) "[A] network adaptive device for implementing communication between the Softswitch device and other devices in said Next Generation Network."

As defined in Claim 1, the network adaptive device has the functionality of **implementing communication between the Softswitch device and other devices in said Next Generation Network.** Thereby, the network adaptive device **implements interconnection between the Softswitch device and the Next Generation Network.**

However, _Kaczmarczyk et al. does **not** disclose the elements 138 and 140 are for communication between the Softswitch device and other devices in the Next Generation Network_. And besides, _the elements 138 and 140 in Kaczmarczyk et al. are two elements,_ **but the network adaptive device in Claim 1 of the present application is one.** Thus, the architecture of the elements 138 and 140 in Kaczmarczyk et al. is different from the architecture of the network adaptive device in Claim 1.

Therefore, Kaczmarczyk et al. does not disclose "a network adaptive device for implementing communication between the Softswitch device and other devices in said Next Generation Network."

2) "[A] call server for determining whether the call received by said network adaptive device is a common call or a call of the intelligent network and processing the common call."

Firstly, as Kaczmarczyk et al. does not relate to the intelligent network, _Kaczmarczyk et al. does **not** need to determine whether the call is a common call or a call of the intelligent network._

The call server in Claim 1 is for determining whether the call received by said network adaptive device is a common call or a call of the intelligent network and processing the common

call, which **enables the Softswitch device to distinguish a common call from a call of the intelligent network, and thereby the Softswitch device can process both the common call and the call of the intelligent network**. Of course, if a call is a common call, the call server in Claim 1 will **process the common call**.

However, Kaczmarczyk et al. recites "Network directory server 144 *is responsible for managing user profiles*, such as access authorization, call barring, dial plan, etc. and *providing routing instruction for local and external (local number portability, 1-800) calls*. Network directory server 144 *is also operable to provide address resolution and translation, and accessing subscriber services (special tones and treatments) by sending requests to network functions elements 152 and subscriber services element 150.* Network directory server 144 also handles scripts by accepting, acting, and distribution to correct destinations" (please see lines 38~48 in column 7 of Kaczmarczyk et al.). From this cited portion of Kaczmarczyk et al., the person skilled in the art would understand that *the Network directory server 144 in Kaczmarczyk et al. is for storing user profiles, and providing routing instruction according to user profiles or providing address resolution and translation to get the address of the destinations. Thus, the Network directory server 144 in Kaczmarczyk et al. is for getting the address of the destinations. **These functions relates to resolution, but not to determination**. Besides, it also can be seen from above cited portion of Kaczmarczyk et al. that the Network directory server 144 sends call requests to network functions elements 152 and subscriber services element 150, **without processing the call**.*

Therefore, Kaczmarczyk at el. does not disclose "a call server for determining whether the call received by said network adaptive device is a common call or a call of the intelligent network and processing the common call."

3) "[A]n Intelligent Network Application Part (INAP), Customised Applications for Mobile network Enhanced Logic Application Part (CAP) or Mobile Application Part (MAP) adapter in a higher layer of the call server, the adapter is for responding to the call of the intelligent network and encoding or decoding an INAP message."

Kaczmarczyk at el. does not disclose the above technical features.

4) "[S]aid Softswitch device includes: a network adaptive device located at a bottom layer of the Softswitch device; a call server in a higher layer of the network adaptive device; and an Intelligent Network Application Part (INAP), Customised Applications for Mobile network Enhanced Logic Application Part (CAP) or Mobile Application Part (MAP) adapter in a higher layer of the call server."

It can be seen that the layered architecture of the Softswitch device of Claim 1 includes a network adaptive device located at **a bottom layer** of the Softswitch device; a call server in a **higher layer of the network adaptive device;** and an Intelligent Network Application Part (INAP), Customised Applications for Mobile network Enhanced Logic Application Part (CAP) or Mobile Application Part (MAP) adapter in a **higher layer of the call server. And the common call and the call of the intelligent network are processed in different layers in Claim 1.** Based on this architecture, the Softswitch device in Claim 1 can implement an intelligent network service in the Next Generation Network.

However, there is no such a network adaptive device, a call server and an INAP, CAP or MAP adapter in Kaczmarczyk at el. So, the architecture of the Softswitch in Kaczmarczyk at el. is completely different from that in Claim 1. And, the Softswitch in Kaczmarczyk at el. does **not** disclose how to process the call of the intelligent network.

Therefore, Kaczmarczyk at el. does not disclose "said Softswitch device includes: a network adaptive device located at a bottom layer of the Softswitch device; a call server in a higher layer of the network adaptive device; and an Intelligent Network Application Part (INAP), Customised Applications for Mobile network Enhanced Logic Application Part (CAP) or Mobile Application Part (MAP) adapter in a higher layer of the call server."

By the above distinguishing technical features, Claim 1 of the present application solves a technical problem that **because of the essential differences in structures, principles and standards between traditional PSTN networks and the next generation networks, it is very difficult to realize the interconnection of intelligent network services between PSTN networks and the next generation networks**. (Please see the last two paragraphs of the "Technical Background" section on page 1~2 for a detail.)

Douglas et al. mainly relates to *reuse of services between different domains using a state machine mapping technique, which solves a problem of providing IN service access and reuse for IP end-point subscribers* (please see lines 59~60 in column 1 of Douglas et al.). Douglas at el. neither solves the technical problem solved by Claim 1 nor offers a technical teaching of applying the above distinguishing features of Claim 1 to solve the above problem.

In particular, Douglas et al. does not disclose a "Mobile Application Part (MAP)". Instead Douglas et al. recites "a *TCAP or INAP query is formatted by the SSP* and routed to the SCP for processing. ...... The *SSP may choose to halt call processing until a response is received form the SCP*" (Please see lines 62 in column 4 ~1 in column 5 of Douglas et al.) and "*The SSP can then decode the response and use the information within it as appropriate as it continues with call processing*" (Please see lines 42~44 in column 5 of Douglas et al.)*, which are already defined by ITU. From the above cited portion of Douglas et al., it can be seen that the TCAP or INAP query is processed by SSP and SCP. The response is returned to SSP by SCP. And SSP decodes the response and processes the call. A person having ordinary skill in the art would understand that SSP and SCP are quite different from a Softswitch device. So the above processes in Douglas et al. does not relate to Softswitch device.*

In contrast, the INAP, CAP or MAP adapter is a part of the Softswitch device in Claim 1 of the present application, and it is in a higher layer of the call server. So, the process of responding to the call of the intelligent network and encoding or decoding an INAP message is done by the Softswitch device in Claim 1.

Therefore, the technical features "an Intelligent Network Application Part (INAP), Customised Applications for Mobile network Enhanced Logic Application Part (CAP) or Mobile Application Part (MAP) adapter in a higher layer of the call server, the adapter is for responding to the call of the intelligent network and encoding or decoding an INAP message" in Claim 1 application is neither disclosed nor taught by Douglas et al.

The above distinguishing technical features of Claim 1 are not disclosed or taught by other documents cited in the Office Action.

Zhang et al. (U.S Patent No 7,103,644 B1) discloses systems for an integrated data network converged service creation and execution environment (please see lines 10~13 in column 1 of

Zhang et al.). Zhang at el. neither solves the above technical problem solved by Claim 1 of the present application nor offers a technical teaching of applying the above distinguishing features of Claim 1 to solve the above problem.

Those distinguishing technical features of Claim 1 are not common general knowledge.

Therefore, there is no teaching in the prior art as a whole that would have prompted a person having ordinary skill in the art, faced with the above technical problem, to modify or adapt Kaczmarczyk et al. in view of Douglas at el. while taking account of that teaching, thereby arriving at the technical solution of Claim 1 with the above distinguishing technical features. So, Claim 1 is non-obvious to a person having ordinary skill in the art.

Thus, Applicants respectfully submit that Claim 1 of the present application conforms to the provisions of 35 U.S.C. §103(a).

Claims 2-5:

Since Claim 1 conforms to the provisions of 35 U.S.C. §103(a), Claims 2-5 of the present application, which is dependent on Claim 1, also conforms to the provisions of 35 U.S.C. §103(a).

Claim 6:

Claim 6 of the present application recites:

"A system for implementing an intelligent network, the system including a Softswitch device, at least one Service Control Point (SCP) and an IP network, the Softswitch device including a network adaptive device, a call server and an Intelligent Network Application Part (INAP), Customised Applications for Mobile network Enhanced Logic Application Part (CAP) or Mobile Application Part (MAP) adapter, wherein

the network adaptive device is located at a bottom layer of the Softswitch device, the network adaptive device is for implementing communication between the Softswitch device and other devices in said network, as well as receiving the call request;

the call server is in a higher layer of the network adaptive device, the call server is for determining whether a call received by said network adaptive device is a common call or a call of the intelligent network and processing the common call;

the INAP, CAP or MAP adapter is in a higher layer of the call server, the INAP adapter is for responding to the call of the intelligent network and encoding or decoding the INAP message;

the at least one SCP is for executing intelligent service logic and producing INAP messages; and

the IP network is for connecting said Softswitch device and the SCP."

For reasons similar to those stated above for Claim 1, Applicants respectfully submit that Claim 6 of the present application is distinguishable from Kaczmarczyk at el. and includes at least the following distinguishing technical features:

1) "the call server is for determining whether a call received by said network adaptive device is a common call or a call of the intelligent network and processing the common call;"

2) "the INAP, CAP or MAP adapter is for responding to the call of the intelligent network and encoding or decoding the INAP message;"

3) "the Softswitch device including a network adaptive device, a call server and an Intelligent Network Application Part (INAP), Customised Applications for Mobile network Enhanced Logic Application Part (CAP) or Mobile Application Part (MAP) adapter; the network adaptive device is located at a bottom layer of the Softswitch device; the call server is in a higher layer of the network adaptive device; and the INAP adapter is in a higher layer of the call server."

By the distinguishing technical features, Claim 6 also solves the technical problem that **because of the essential differences in structures, principles and standards between traditional PSTN networks and the next generation networks, it is very difficult to realize the interconnection of intelligent network services between PSTN networks and the next generation networks**.

From the above analysis of Douglas at el., it can be seen that Douglas at el. neither solves the above technical problem solved by Claim 6 of the present application nor offers a technical teaching of applying the above distinguishing features of Claim 6 to solve the above problem.

The above distinguishing technical features of Claim 1 are not disclosed or taught by other documents cited in the Office Action.

From the above analysis of Zhang et al., it can be seen that Zhang at el. neither solves the above technical problem solved by Claim 1 of the present application nor offers a technical teaching of applying the above distinguishing features of Claim 1 to solve the above problem.

Those distinguishing technical features of Claim 6 are not common general knowledge.

Therefore, the subject matter of Claim 6 is non-obvious to a person having ordinary skill in the art. Thus Applicants respectfully submit that Claim 6 of the present application conforms to the provisions of 35 U.S.C. §103(a).

Claims 7 and 8:

Since Claim 6 conforms to the provisions of 35 U.S.C. §103(a), Claims 7 and 8 of the present application, which are dependent on Claim 6, also conform to the provisions of 35 U.S.C. §103(a).

Claim 9:

Claim 9 of the present application recites:

"A method for a PSTN telephone to access into an intelligent network service in a next generation network, wherein there is at least one SCP in said next generation network for executing the intelligent service logics, said method including:

issuing a call request from said PSTN telephone through dialing an accessing code;

a network adaptive device in a Softswitch device transforming said call request issued by said PSTN telephone into a protocol format suitable for the next generation network;

a call server in the Softswitch device determining whether said call request is an intelligent network service provided by the SCP or not;

if said call request is an intelligent network service provided by the SCP, an Intelligent Network Application Part (INAP), Customised Applications for Mobile network Enhanced Logic Application Part (CAP) or Mobile Application Part (MAP)adapter in the Softswitch device encoding said call request into an INAP message and transferring the message to said SCP; and

responding to said INAP message and processing said call request by said SCP."

For at least reasons similar to those stated above for Claim 1, Applicants respectfully submit that compared with Kaczmarczyk et al., Claim 9 of the present application includes at least the following distinguishing technical features:

(1) "[A] network adaptive device in a Softswitch device transforming said call request issued by said PSTN telephone into a protocol format suitable for the next generation network."

As defined in Claim 9, a network adaptive device can transform a call request issued by a PSTN telephone into a protocol format suitable for the **next generation network**.

However, *Kaczmarczyk et al. does **not** disclose that the elements 138 and 140 are for communication between the Softswitch device and other devices in the Next Generation Network*. In addition, *the elements 138 and 140 in Kaczmarczyk et al. are two elements,* **but the network adaptive device in Claim 9 is one.** Thus the elements 138 and 140 in Kaczmarczyk et al. is different from the network adaptive device in Claim 9.

Therefore, Kaczmarczyk et al. does not disclose "a network adaptive device in a Softswitch device transforming said call request issued by said PSTN telephone into a protocol format suitable for the next generation network".

(2) "[A] call server in the Softswitch device determining whether said call request is an intelligent network service provided by the SCP or not;" and

(3) "if said call request is an intelligent network service provided by the SCP, an Intelligent Network Application Part (INAP), Customised Applications for Mobile network Enhanced Logic Application Part (CAP) or Mobile Application Part (MAP) adapter in the Softswitch device encoding said call request into an INAP message and transferring the message to said SCP."

By the distinguishing technical features, Claim 9 also solves the technical problem that **because of the essential differences in structures, principles and standards between traditional PSTN networks and the next generation networks, it is very difficult to realize**

the interconnection of intelligent network services between PSTN networks and next generation networks.

From the above analysis of Douglas at el., it can be seen that Douglas at el. neither solves the above technical problem nor offers a technical teaching of applying the above distinguishing features of Claim 9 to solve the above problem.

The above distinguishing technical features of Claim 9 are not disclosed or taught by other documents cited in the Office Action.

From the above analysis of Zhang et al., it can be seen that Zhang at el. neither solves the above technical problem solved by Claim 9 of the present application nor offers a technical teaching of applying the above distinguishing features of Claim 9 to solve the above problem.

The distinguishing technical features of Claim 9 are not common general knowledge.

Therefore, the subject matter of Claim 9 is non-obvious to a person having ordinary skill in the art. Thus, Applicants respectfully submit that Claim 9 of the present application conforms to the provisions of 35 U.S.C. §103(a).

Claims 10 and 12:

Since Claim 9 conforms to the provisions of 35 U.S.C. §103(a), Claims 10 and 12 of the present application, which are dependent on Claim 9, also conform to the provisions of 35 U.S.C. §103(a).

Claim 13:

Claim 13 defines a method for a telephone in a next generation network to access into an intelligent network service in a PSTN network.

For at least reasons similar to those stated above for Claim 9, Applicants respectfully submit that Claim 13 also conforms to the provisions of 35 U.S.C. §103.

Claims 14 and 15:

Since Claim 13 conforms to the provisions of 35 U.S.C. §103(a), Claims 14 and 15 of the present application, which are dependent on Claim 13, also conform to the provisions of 35 U.S.C. §103(a).

Claim 17:

Claim 17 defines a method for a telephone in a next generation network to access into an intelligent network service in a PSTN network.

For at least reasons similar to those stated above for Claim 9, Applicants respectfully submit that Claim 17 also conforms to the provisions of 35 U.S.C. §103.

Claims 18 and 19:

Since Claim 17 conforms to the provisions of 35 U.S.C. §103(a), Claims 18 and 19 of the present application, which are dependent on Claim 17, also conform to the provisions of 35 U.S.C. §103(a).

The Office Action rejected Claims 11, 16 and 20 under 35 U.S.C. §103(a) as being unpatentable over U.S Patent No. 6,950,441 B1 to Kaczmarczyk et al. in view of U.S Patent No. 6,363,424 B1 to Douglas et al. in further view of U.S Patent No 7,103,644 B1 to Zhang et al.. Applicants respectfully traverse the rejections of these claims for the reasons below, and submit that Claims 11, 16 and 20 conform to the provisions of 35 U.S.C. §103(a).

Claim 11:

Since Claim 10 conforms to the provisions of 35 U.S.C. §103(a) as stated above, Claim 11 of the present application, which is dependent on Claim 10, also conforms to the provisions of 35 U.S.C. §103(a).

Claim 16:

Since Claim 13 conforms to the provisions of 35 U.S.C. §103(a) as stated above, Claim 16 of the present application, which is dependent on Claim 13, also conforms to the provisions of 35 U.S.C. §103(a).

Claim 20:

Since Claim 19 conforms to the provisions of 35 U.S.C. §103(a) as stated above, Claim 20 of the present application, which is dependent on Claim 19, also conforms to the provisions of 35 U.S.C. §103(a).

Conclusion

In light of the above, the Applicants submit that the application is in condition for allowance and respectfully request that a Notice of Allowance be issued in this case. The Applicants also request that the Office telephone the attorneys of record in the event a telephone discussion would be helpful in advancing the prosecution of the present application.

Respectfully submitted,

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